

What is claimed is:

1. Semi-conducting thin sheet wedges comprising:
 a mica matrix, wherein said mica matrix comprises mica flakes; and
 a conductive resin impregnated within said mica matrix;
 wherein said thin sheet wedges have a semi-conductive property of
 between 500-500,000 ohms per square.
2. The semi-conducting thin sheet wedges of claim 1, wherein said
 thin sheet wedges have a thickness of between about 15-80 mils (0.38-2.0
 mm).
3. The semi-conducting thin sheet wedges of claim 1, wherein said
 mica flakes comprise at least one of muscovite, phlogopite and combinations
 thereof.
4. The semi-conducting thin sheet wedges of claim 1, wherein said
 resin comprises approximately 15-40% by weight of said thin sheet wedges.
5. The semi-conducting thin sheet wedges of claim 1, wherein said
 resin is C-black.
6. The semi-conducting thin sheet wedges of claim 1, wherein said
 thin sheet wedges have a tensile modulus of between 1-8 million PSI.
7. The semi-conducting thin sheet wedges of claim 1, wherein said
 thin sheet wedges further comprises at least one glass fiber layer.
8. The semi-conducting thin sheet wedges of claim 7, wherein the
 ratio of the mica in said mica matrix to the glass fiber is approximately
 between 2:1 and 7:1 by weight.

9. The semi-conducting thin sheet wedges of claim 7, wherein said at least one glass fiber layer forms a backing for said mica matrix.
10. The semi-conducting thin sheet wedges of claim 7, wherein said at least one glass fiber layer is interwoven with said mica matrix.
11. The semi-conducting thin sheet wedges of claim 10, wherein said at least one glass fiber layer is interwoven in a half-lap manner.
12. Semi-conducting thin sheet wedges comprising:
a mica matrix, wherein said mica matrix comprises mica flakes;

at least one layer of glass fiber; and

a conductive resin impregnated within at least one of said mica matrix and said at least one layer of glass fiber;

wherein said thin sheet wedges have a semi-conductive property of between 500-500,000 ohms per square;

wherein said thin sheet wedges have a tensile modulus of between 1-8 million PSI.
13. The semi-conducting thin sheet wedges of claim 12, wherein the ratio of the mica in said mica matrix to the glass fiber is approximately between 2:1 and 7:1 by weight.
14. The semi-conducting thin sheet wedges of claim 12, wherein said at Least one glass fiber layer forms a backing for said mica matrix.
15. The semi-conducting thin sheet wedges of claim 12, wherein said at least one glass fiber layer is interwoven with said mica matrix.

16. The semi-conducting thin sheet wedges of claim 15, wherein said at least one glass fiber layer is interwoven in a half-lap manner.
17. The semi-conducting thin sheet wedges of claim 12, wherein said mica flakes comprise at least one of muscovite, phlogopite and combinations thereof.
18. The semi-conducting thin sheet wedges of claim 12, wherein said resin comprises approximately 15-40% by weight of said thin sheet wedges.
19. The semi-conducting thin sheet wedges of claim 12, wherein said resin is C-black.
20. A method for making semi-conductive thin sheet wedges comprising:
 - layering a mica matrix onto a glass fiber backing, wherein said mica matrix comprises mica flakes;
 - impregnating into said mica matrix and said glass fiber a conductive resin; and
 - curing said conductive resin.